

Flavored Tobacco and Vaping Policy Considerations

General Information Session

Presentation prepared by City of Bloomington Division of Public Health Association for Nonsmokers-Minnesota August 2020



Presenters

- Margaret Perez, Division of Public Health, City of Bloomington mperez@bloomingtonmn.gov
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Overview

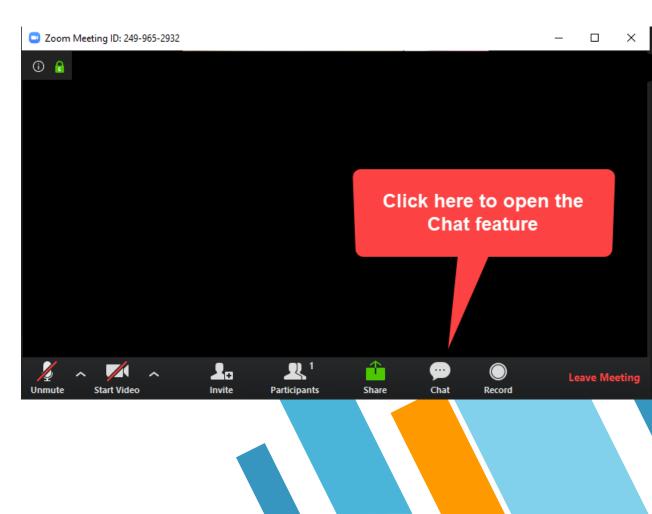
- Data on Youth Tobacco Use
- Overview of flavored tobacco and e-cigarettes
- Health effects of flavored tobacco and vaping
- Tobacco industry marketing
- Policies being considered in Bloomington
- Q & A





Housekeeping

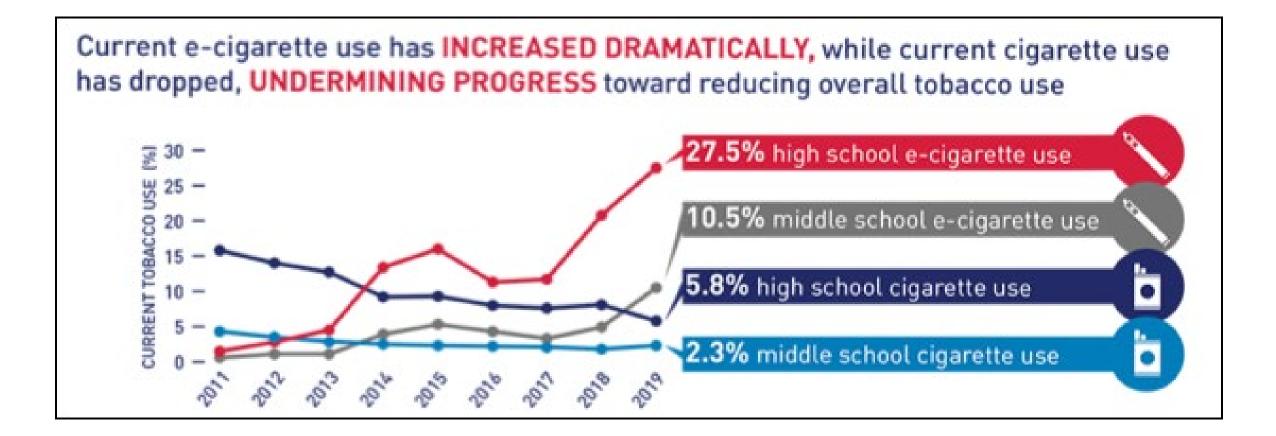
- » Don't talk over others, wait your turn or use the chat feature
- » Be respectful
- » Stay Focused on the Topic
- » Be aware of how much you're speaking
- » Recording for note taking purposes
- » Final report shared with council
- » Please note whether or not you are a Bloomington resident
 - ♦ CHAT → How many tobacco retailers are there in Bloomington? (Bloomington resident)
 - Or note if you are a resident before/after you speak



Data on Youth Tobacco Use

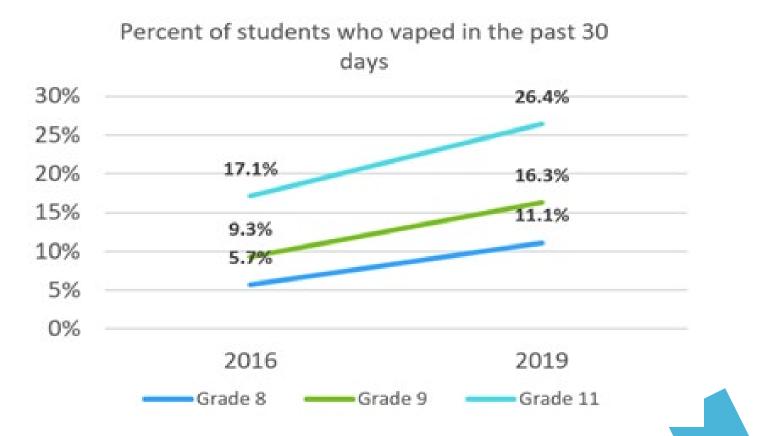


 Note: All images are either from ANSR, captured from tobacco sites online or industry social media sites or from fair use from across the Internet.



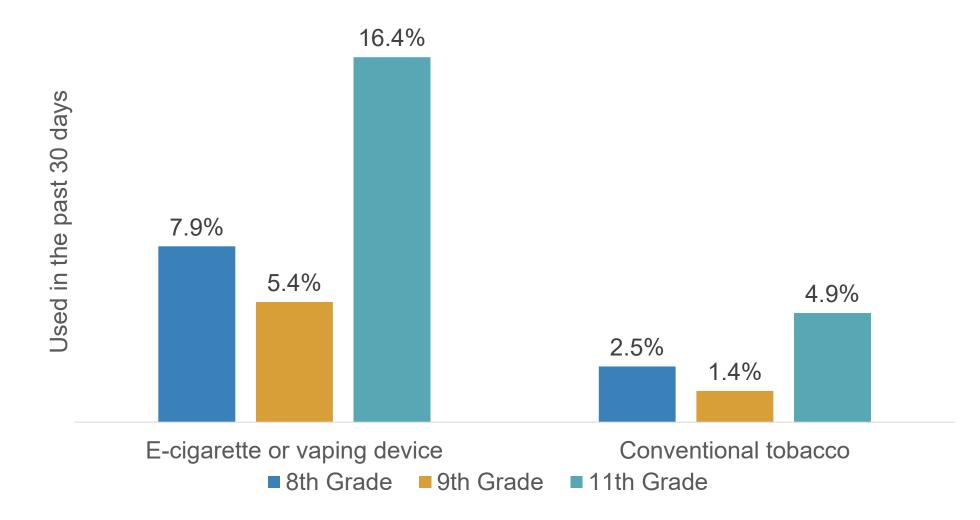
Source: 2019 National Youth Tobacco Survey

E-Cigarette Use among MN Youth



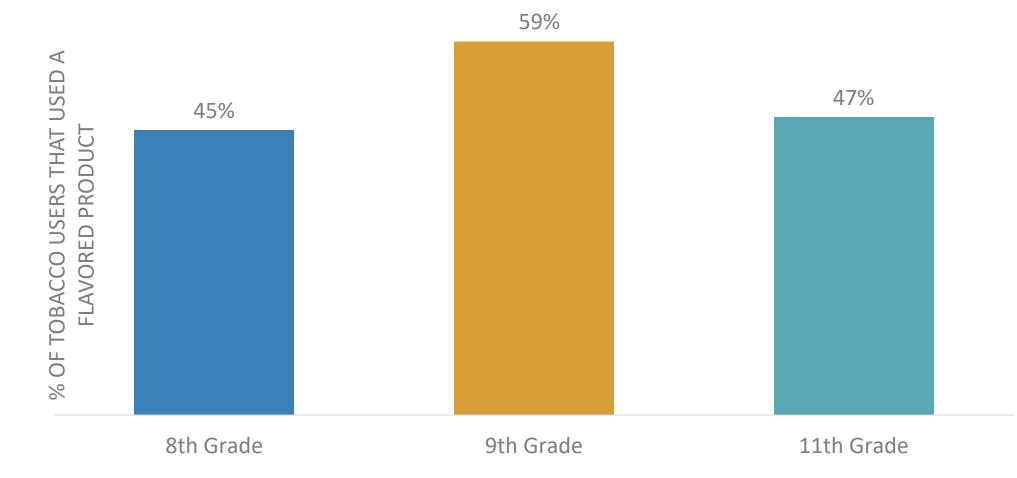
Source: 2019 Minnesota Student Survey

Tobacco Use by Type and Grade Bloomington Public School District, 2019



Source: 2019 Minnesota Student Survey

Use of flavored tobacco products in last 30 days, among Bloomington youth tobacco users, 2019



Source: 2019 Minnesota Student Survey

Health Effects of Flavored Tobacco Products

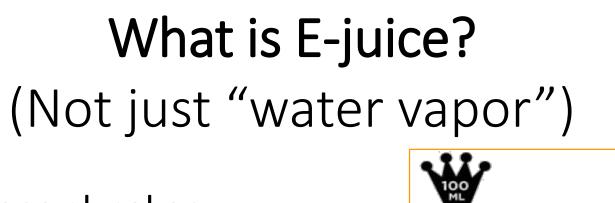


- » All e-cigs consist of a battery, heating element and cartridge to hold the e-juice.
- » The vaping device heats the e-juice, producing a nicotine aerosol that is inhaled.
- » Almost all e-juice contains varying levels of nicotine.

Source: Ingebrethsen, B. J., Cole, S. K. & Alderman, S. L. Electronic cigarette aerosol particle size distribution measurements. Inhal. Toxicol. 24, 976–84 (2012).

The Evolution of Vaping Devices ______It's not flavor and water





- Propylene glycol or vegetable glycerin-based liquid with nicotine, flavoring and other chemicals and metals, but not tobacco.
- Many of these particles contain varying amounts of toxic chemicals and a wide variety of other substances.



Chemicals in E-Liquid



E-cigarettes create many of the same CANCER-CAUSING CHEMICALS that are in cigarettes, like formaldehyde and volatile organic compounds.

E-cigarette Aerosol Composition

	• P	ropylene glycol	•	Chlorobenzene	•	Benzo(ghi)perylen	e	Cadmium	
	• G	ilycerin	•	Crotonaldehyde	•	Acetone		 Silicon 	
	• F	lavorings (many)	•	Propionaldehyde	٠	Acrolein		Lithium	
	• N	icotine	•	Benzaldehyde	•	Silver		Lead	
	• N	NN	•	Valeric acid	٠	Nickel		 Magnesium 	
	• N	NK	•	Hexanal	•	Tin		 Manganese 	
	• NAB		All of these have been found				d	Potassium	
	• NAT							Titanium	
Ethylbenzene		in e-cig aerosol					Zinc		
	• B	enzene	•	Acenaphthylene	•	Aluminum		 Zirconium 	
	• X	ylene	•	Acenapthene	٠	Chromium		 Calcium 	
	• T	oluene	•	Fluoranthene	•	Boron		• Iron	
	• A	cetaldehyde	•	Benz(a)anthracene	•	Copper		 Sulfur 	
		maldehyde	•	Chrysene	٠	Selenium		 Vanadium 	
PREVENTION	ON N	phthalene	•	Retene	٠	Arsenic		 Cobalt 	
TOOLK	T	rene	•	Benzo(a)pyrene	•	Nitrosamines,		Rubidium	
nzo(b)fluoranthe		 Indeno(1,2,3- cd)pyrene 		Polycyclic aromatic hydrocarbons			Compounds in yellow are from FDA 2012, Harmful and Potentially Harmful Substances – Established List		

Impact of Nicotine on the Adolescent Brain

- » No amount of nicotine is safe for youth.
- » Adolescent behaviors are largely driven by a strong emotional, reward-systems response as opposed to strong cognitive self- control and adult decision making strategies which are still developing.
- » As a result of the maturation process the adolescent brain is also MORE SENSITVE and VULNERABLE to the rewarding effects of NICOTINE.



Sources: Nelson et al. 2008. Abreu-Villaca et al. 2003.

"Nic Sick" AKA Nicotine Poisoning

"I've currently been experiencing feelings of nic sick. I would describe it as the worst nausea, the worst headache, dizziness; I felt like I was going to faint."

> - Blaine, MN High School Junior describing her addiction to e-cigarettes.

- Symptoms include:
 - Nausea and vomiting
 - Racing heart
 - Sweating or clamminess
 - Anxiety
 - Abnormal heart rate
 - Extreme fatigue
 - Dizziness

Impact on the Cardiovascular System

- » E-cigarette use linked to higher risk of stroke, heart attack and diseased arteries.
- New research finds e-cigarettes may be more harmful to the heart than traditional cigarettes.
- New study finds that vaping just once even when it doesn't contain nicotine or THC can damage a person's blood vessels.

Source: Alzahrani, Talal et al. Association Between Electronic Cigarette Use and Myocardial Infarct



E-cigarette Impact on Your Lungs

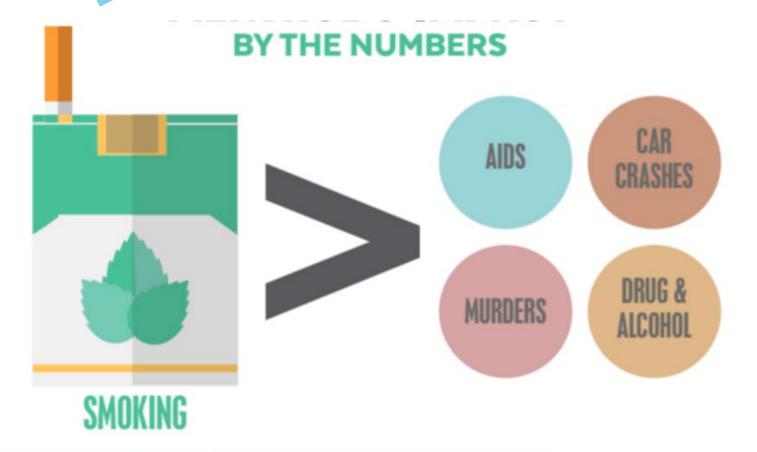
Vaping aerosols penetrate deeply into the respiratory system.

- » Can cause breathing difficulties
- » Lower defense against bacterial and viral pathogens
- » May harm cilia, the first line of defense in the lungs
- » Potential danger from metal coil element
 leaching heavy metals into the heated e-juice
 which is then inhaled



Source: Park 2019

Menthol = Easier to start, harder to Quit



• Increases nicotine absorption, leading to greater dependence.

• Among high school smokers, users more likely to smoke within one hour of waking and more likely to report cravings compared to high school smokers of non-menthols.

ACCORDING TO THE CENTERS FOR DISEASE CONTROL AND PREVENTION, smoking-related illnesses kill more Black Americans than AIDS, car crashes, murders and drug and alcohol abuse combined.¹

THE AFRICAN AMERICAN TOBACCO CENTRAL LEADERSHIP COUNCIL

Source: Wackowski & Delnevo, 2007. Menthol cigarettes and indicators of tobacco dependence among adolescents. *Addictive Behaviors, 32*(9), 1964-1969.

In the News



FOR DISEASE CONTROL AND PREVENTION

Illinois Patient's Death May Be First in US Tied to Vaping By The Associated Press Aug. 23, 2019 CHICAGO — Health officials said Friday that an Illinois patier ↑ | = ALL SECTIONS | P * StarTribune

The New Hork Times

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Teen lung diseases linked to vaping, Minnesota Health **Department reports** Minnesota health officials raise alarm after four teens are

hospitalized.

By Jeremy Olson Star Tribune AUGUST 13, 2019 - 9:52PM



After having issued general warnings before, this is the first time Minnesota health officials have issued a public notice directly linking the use of vaping products to specific patient illnesses.

Four cases of severe lung injury in the Twin Cities are being linked to vaping and e-cigarette use, prompting state health officials to warn the public about the harm of these products and to advise doctors to be on the lookout.

EVALI Symptoms include: coughing, shortness of breath, chest pain, fatigue, nausea, and vomiting

Source: CDC releases from CDC.org

As of 2/18/20:

2,807 cases of lung illnesses associated with vaping in 50 states, U.S. territories and Washington, D.C.

More than 50% of cases are in people ages 13 - 24

68 confirmed deaths in 29 states and Washington, D.C.



Tobacco Industry Marketing

- The tobacco industry
 spends \$110 million on
 marketing each year in
 Minnesota (2020)
- The industry is constantly
 looking to replace smokers
 who die from diseases
 related to tobacco use.



Marketing of menthol tobacco

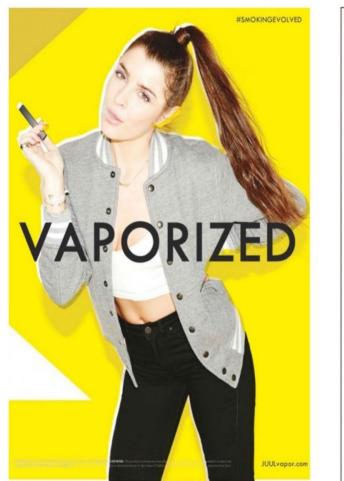






Source: Stanford School of Medicine

Juul marketing campaign compared to Big Tobacco cigarette ads







2016





The New York Times

Juul Bought Ads Appearing on Cartoon Network and Other Youth Sites, Suit Claims

The case, brought by Massachusetts after a lengthy investigation, presents some of the strongest evidence the vaping company was marketing to teenagers.

02/12/20





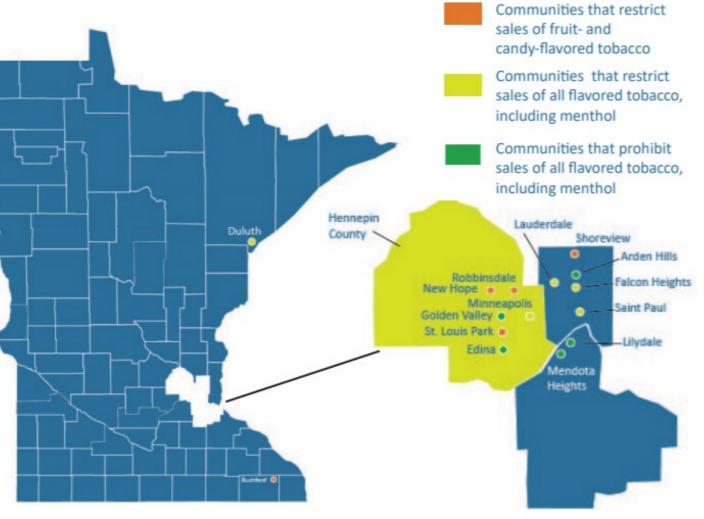
Federal Landscape and Implications

- » January 2020: temporary ban on some pod-based, candyflavored e-cigarettes
- » Exempt: menthol, open-tank and disposable vaping products; flavored cigars and cigarillos

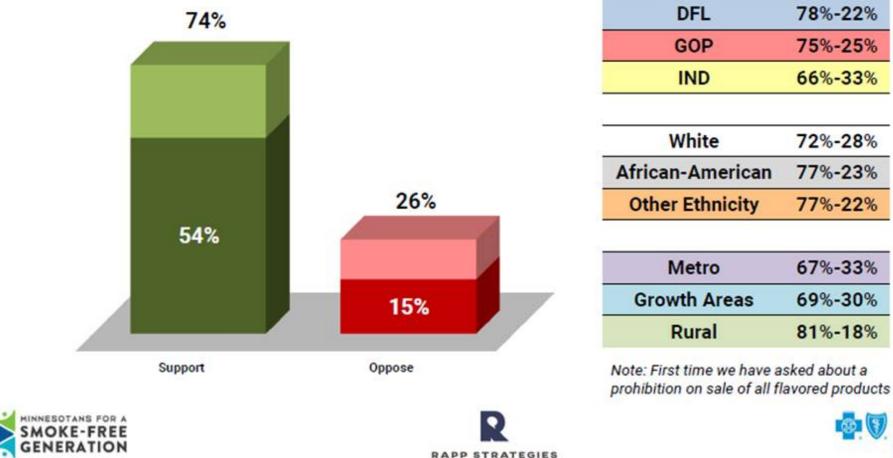


Local Policies being Considered in Bloomington

- » Building/Strengthening federal ban
 - All flavors, including menthol
 - All products, including open tank, disposable and cigars/cigarillos
 - Adult only with licensing restrictions OR restricting sales to certain areas or types of retailers in the city
- » Other complimentary policies:
 - May be paired with a licensing cap
 - Tobacco retail buffers around parks and schools



SUPPORT FOR PROHIBITING SALES OF ALL FLAVORED **TOBACCO PRODUCTS (INCLUDING MENTHOL CIGARETTES)**



DFL	/8%-22%
GOP	75%-25%
IND	66%-33%
White	72%-28%
African-American	77%-23%
Other Ethnicity	77%-22%
Metro	67%-33%
Growth Areas	69%-30%

700/ 000/

81%-18%

DEI

Rural



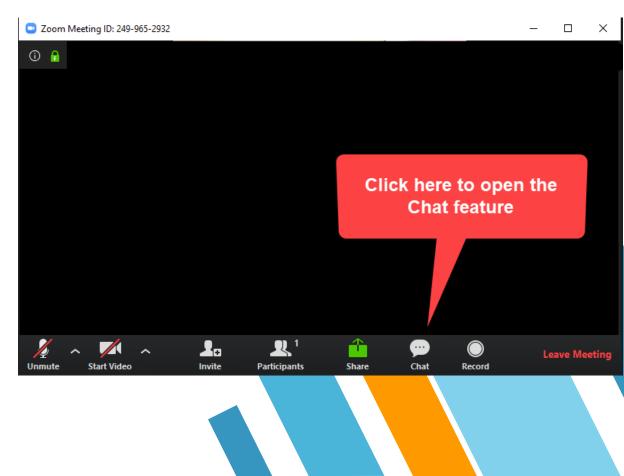


Q&A



Reminder...

- » Identify yourself as a Bloomington resident
- » Mute if you are not speaking
- » Don't talk over others, wait your turn or use the chat feature
- » Listen to understand
- » Be respectful
- » Stay focused on the question/topic
- » Be aware of how much you're speaking



Comments

• No comments received